



TechnoCoat® Bond EP

High Build Solvent Free Structural Bonding Epoxy Agent & Adhesive
For The Bonding Of Old To New Concrete

Description:

TechnoCoat® Bond EP is a high build solvent free Structural bonding epoxy agent and adhesive for the bonding of old to new concrete, render to old concrete. TechnoCoat® Bond EP is supplied as a two-component material in pre-weighed quantities ready for on-site mixing and use.

Usage:

Application of TechnoCoat® Bond EP to wet or dry, properly prepared substrates assures tenacious adhesion of new toppings, patching compounds and tile bedding mortars when used in accordance with instructions.

Features & Benefits:

- Pre-weighed quality controlled materials ensure consistency and reduce risk of site errors.
- High bonding strength, ultimate bond strength is greater than cohesive strength of concrete
- Moisture tolerant, can be applied on slightly damp surfaces
- Non-shrinking
- High chemical resistance
- High durability
- Can be applied in both internal and external areas.

Typical Properties at 25°C:

Mixed Appearance	Thick grey paste
Tensile strength (ASTM D638)	30 N/mm ²
Water Absorption (ASTM D570)	0.05%
Slant shear bond strength (ASTM C 882)	> 30 N/mm ² @7 days
Working Life	@ 25°C 160mins @ 30°C : 90 mins @ 35°C : 80 mins
Initial curing Time	>24 hrs
Full cure	5 days @ 35°C 4 days @ 45°C
Compressive Strengths (ASTM D695)	70 N/mm ²
Maximum Overlay time	16 hours @ 25°C 12 hours @ 35°C 5 hours @ 45°C
Minimum overlay time	Overlay when tacky but not wet

*All technical data stated herein is based on tests carried out under laboratory conditions.

Applications Instructions:

Substrate Preparation:

Proper surface preparation is the key to any successful repair application using TechnoCoat® Bond EP. The surface must be structurally sound, free from oil, grease and other forms of contamination. Concrete surface should be dry and suitably prepared either by scabbling or grit blasting to remove any surface laitance. Steel surfaces should be grit blasted to remove all rust and scale. The effectiveness of decontamination and soundness of the substrate should then be assessed by a pull-off test. Cement laitance should be removed by wire brushing or grit sand blasting before priming with TechnoCoat® Bond EP.

Mixing:

Care should be taken to ensure that TechnoCoat® Bond EP is thoroughly mixed to produce a fully homogeneous mix. The 'hardener' and 'base' components should be stirred separately before mixing to disperse any settlement. The entire contents of the 'hardener' tin should then be poured into the 'base' tin and the two materials thoroughly mixed using a suitable slow-speed drill and mixing paddle for 2 minutes until a fully uniform colour is obtained. The sides of the tin should then be scraped and mixing should continue for a further 2 minutes. Any steel reinforcement and formwork should be prepared, cut to size and shape, and made ready for assembly before mixing commences.

Application:

TechnoCoat® Bond EP should be applied as soon as the mixing process has been completed. It should be brush or spray applied to the prepared surfaces. Spray application requires a heavy duty airless spray machine fitted with 19 - 20 thou tip. The new concrete or screed should be applied to the coated substrate after the TechnoCoat® Bond EP has become tacky and within 90 minutes at 20°C, i.e. while the TechnoCoat® Bond EP is still tacky.

If the TechnoCoat® Bond EP is allowed to become tack-free, a second coat will be required. This second coat must be applied the same day as the first coat otherwise the first coat will need to be mechanically removed. As soon as the TechnoCoat®.

When required to form a barrier between chloride contaminated concrete and TechFin® or TechnoCem™ repair material, the prepared concrete should be primed with TechnoCoat® Bond EP and allowed to cure for 8 to 24 hours. This coating should be impermeable and any unfilled voids (blow-holes) should be filled with TechnoSeal® EPA before proceeding. Apply a second coat of TechnoCoat® Bond EP and leave for 30 minutes before the TechFin® or TechnoCem™ repair material is applied to the tacky surface.

Low temperature working:

To facilitate mixing and application at temperatures below 15°C, the separate components should be warmed up to a maximum temperature of 25°C before beginning to mix. If heated to 25°C, the subsequently mixed material will need to be used more speedily as the pot-life will be reduced to 20 minutes. Alternatively, the material should be stored in an environment heated to 20°C and only removed immediately before use.

High temperature working:

At ambient temperatures above 30°C, the material should be stored in the shade or in an air-conditioned environment for 12 hours before use.

Packaging:

TechnoCoat® Bond EP is supplied in 6 Kg, 10 kg & 20 kg composite packs. Packaging size may vary subject to local regulations and requirements.

Cleaning:

Tools and equipments should be cleaned within the pot life of the grout with **TechnoFix® Eco Cleaner**. Cured material can only be removed mechanically.

Storage:

24 months from date of production if kept in undamaged and unopened original sealed containers and store at protected area from direct sunshine in dry and cool condition at temperatures between 10°C-30°C.

Limitations:

TechnoCoat® Bond EP should not be applied when the temperature is below 5°C or is 5°C and falling. Before the application of any repair material or topping, TechnoCoat® Bond EP should be allowed to become tacky after its application to the host substrate. Due to the relatively slow setting time of TechnoCoat® Bond EP, care should be taken when the product is used in cold conditions and or when the material being subsequently applied to the TechnoCoat® Bond EP is rapid setting. In cold conditions ≤ 15°C the TechnoCoat® Bond EP may not set quick enough to bond to a rapidly setting topping which may then "curl" due to shrinkage tension. This would result in delamination of the topping away from the host substrate. If there is a possibility of these conditions on site, users are advised to contact Sterling Technotrade Technical Representative for specific guidance.

Health & Safety Instructions:

Some people are sensitive to resins so gloves and a barrier cream should be used when handling TechnoCoat® Bond EP. If contact with the resin occurs, it must be removed, before it hardens, with a resin removing cream. Follow by washing with soap and water. Do not use solvent. The use of goggles is recommended but should accidental eye contamination occur, wash thoroughly with plenty of water and seek medical treatment immediately.

Ensure adequate ventilation in volume and pattern in working area and do not smoke during use. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment.

Product only for professional use.

Additional Information: Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

Disclaimer: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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